

ABSTRACT OF THE DISCLOSURE

A lower electrode is formed on a substrate, a capacitive insulating film is formed out of a ferroelectric film on the lower electrode, and an upper electrode is formed on the capacitive insulating film. A contact layer is formed on the upper electrode. The contact layer is either a single-layer film made of a metal oxide or a metal nitride or a multilayer structure made up of metal oxide and metal nitride films. An insulating film is formed to cover the lower electrode, capacitive insulating film, upper electrode and contact layer. A contact hole is opened through the insulating film and the contact layer to reach the upper electrode. A metal interconnect, which is filled in the contact hole and connected to the upper electrode, is formed on a part of the insulating film.